

## CLAIMS

1. A test handling apparatus for supplying electronic devices to a tester for testing,  
the test handling apparatus comprising:  
5 a tester interface for communicating with the tester;  
at least two device interfaces each of which is connectable to the tester  
interface through a first connection, and each of which is connectable to a  
corresponding group of electronic devices through a second connection;  
wherein one of the first and the second connections is alternately connectable.  
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2. The test handling apparatus as claimed in claim 1, wherein the first connection is  
alternately connectable and the second connection is simultaneously connectable.
3. The test handling apparatus as claimed in claim 2, wherein the first connection  
15 comprises a switch for alternately connecting the at least two device interfaces to  
the tester interface.
4. The test handling apparatus as claimed in claim 3, further comprising a loading /  
unloading assembly for supplying electronic devices to the at least two device  
20 interfaces for testing, and retrieving the electronic devices from the at least two  
device interfaces upon completion of testing.
5. The test handling apparatus as claimed in claim 4, wherein the loading / unloading  
assembly comprises one test arm for simultaneously supplying electronic devices  
25 to the at least two device interfaces for testing, and simultaneously retrieving the  
electronic devices from the at least two device interfaces upon completion of  
testing.
6. The test handling apparatus as claimed in claim 4, wherein the loading / unloading  
30 assembly comprises at least two independently-operable test arms for alternately  
supplying electronic devices to the at least two device interfaces for testing, and

alternately retrieving electronic devices from the at least two device interfaces upon completion of the testing.

5           7.     The test handling apparatus as claimed in claim 4, further comprising a controller associated with the switch for controlling the loading / unloading assembly.

8.     The test handling apparatus as claimed in claim 1, wherein the first connection is simultaneously connectable and the second connection is alternately connectable.

10       9.     The test handling apparatus as claimed in claim 7, further comprising a loading / unloading assembly for alternately supplying electronic devices to the at least two device interfaces for testing, and retrieving the electronic devices from the at least two device interfaces upon completion of the testing, wherein the loading / unloading assembly is movable between an input section for picking up electronic devices and a pre-connecting position adjacent to the at least two device interfaces,  
15     the loading / unloading assembly further comprising:

          a test arm for simultaneously carrying electronic devices to the pre-connecting position; and

          an actuator for alternately supplying electronic devices to the at least two  
20     device interfaces for testing.

10.    The test handling apparatus as claimed in claim 7, further comprising a loading / unloading assembly for alternately supplying electronic devices to the at least two device interfaces for testing, and retrieving the electronic devices from the at least two device interfaces upon completion of the testing, wherein the loading / unloading assembly comprises at least two independently-operable test arms each for simultaneously carrying electronic devices, each test arm being movable between an input section for picking up electronic devices and a respective pre-connecting position adjacent to a respective device interface,  
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30       wherein each of the at least two independently operable test arms has at least one actuator for alternately supplying electronic devices to the at least two device interfaces for testing.

11. A test handling apparatus for testing electronic devices, the test handling apparatus comprising:

an interface for external communications;

a first test socket for receiving a first group of electronic devices for testing;

a second test socket for receiving a second group of electronic devices for testing; and

a switch for alternately connecting the first test socket and the second test socket to the interface,

wherein the first test socket and the second test socket receive electronic devices at substantially the same time.

12. The test handling apparatus as claimed in claim 11, further comprising a loading / unloading assembly for supplying the first group of electronic devices to the first test socket and the second group of electronic devices to the second test socket for testing, and retrieving the first group of electronic devices from the first test socket and the second group of electronic devices from the second test socket upon completion of the testing, wherein the loading / unloading assembly comprises a test arm for simultaneously supplying the first and the second groups of electronic devices to the respective first and second test sockets for testing, and simultaneously retrieving the first and second groups of electronic devices from the first and second test sockets upon completion of the testing.

13. The test handling apparatus as claimed in claim 11, further comprising a loading / unloading assembly for supplying the first group of electronic devices to the first test socket and the second group of electronic devices to the second test socket for testing, and retrieving the first group of electronic devices from the first test socket and the second group of electronic devices from the second test socket upon completion of the testing, wherein the loading / unloading assembly comprises:

a first test arm for supplying the first group of electronic devices to the first test socket for testing, and retrieving the first group of electronic devices from the first test arm upon completion of the testing; and

a second test arm for supplying the second group of electronic devices to the second test socket for testing, and retrieving the second group of electronic devices from the second test arm upon completion of the testing, wherein the first test arm and the second test arm are independently actuatable for supplying and retrieving the electronic devices.

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14. A method of automatically testing electronic devices comprising the steps of:  
in a primary test cycle,  
(a) connecting a first group of electronic devices to a tester interface for testing;  
(b) disconnecting the first group of electronic devices from the tester interface upon completion of the testing;  
(c) connecting a second group of electronic devices to the tester interface for testing;  
(d) disconnecting the second group of electronic devices from the tester interface upon completion of the testing.

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15. The method as claimed in claim 14, further comprising a step of, before the step (a), loading a first group and a second group of electronic devices to a test site.

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16. The method as claimed in claim 14, further comprising a step of, after the completion of step (d), unloading the first group and a second group of electronic devices from the test site.

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17. The method as claimed in claim 14, wherein the steps (b) and (c) are simultaneously operable.

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18. The method as claimed in claim 14, further comprising a step of, before the step (a), loading a first group of electronic devices to the test site, and after the completion of step (b), unloading the first group of electronic devices from the test site.

19. The method as claimed in claim 18, further comprising a step of, during unloading the first group of electronic devices from the test site, loading a second group of electronic devices to a test site.
- 5 20. The method as claimed in claim 14, further comprising a plurality of subsequent test cycles repeating the steps of the primary test cycle.